WE CLAIM:

1. A method of monitoring thermal treatment of a tissue region of interest within a patient, said thermal treatment including heating of said tissue region of interest, comprising:

obtaining a first X-ray image of said tissue region of interest, said first X-ray image comprising X-ray image values corresponding with an array of spatial locations throughout said tissue region of interest;

acquiring at least a second X-ray image of said tissue region of interest after at least a portion of said thermal treatment, said second X-ray image comprising X-ray image values corresponding with said array of spatial locations throughout said tissue region of interest;

generating thermal information in relation to each of said spatial locations by employing said first X-ray image and said at least a second X-ray image, wherein said thermal information is indicative of relative magnitudes of temperature changes for each of said spatial locations throughout said tissue region of interest;

spatially displaying said thermal information for said array of spatial locations, wherein said relative magnitudes of temperature changes throughout said tissue region of interest are visually discernable.

2. A method according to Claim 1, wherein said displaying step comprises:

representing a plurality of different ranges of relative magnitudes of temperature changes utilizing a corresponding plurality of different colors.

3. A method according to Claim 1, wherein said displaying step is accomplished in accordance with a predetermined transfer function.

4. A method according to Claim 3, wherein:

said predetermined transfer function is a linear function.

5. A method according to Claim 3, wherein said predetermined transfer function is utilized to amplify at least one portion of said thermal information of predetermined interest.

6. A method according to Claim 5, wherein said displaying step comprises:

utilizing different colors in predetermined relation to the amplification of said thermal information.

7. A method according to Claim 5, wherein said predetermined transfer function is selected from the group consisting of logarithmic and sinusoidal functions.

8. A method according to Claim 1, wherein said displaying step comprises:

utilizing different colors to represent different relative magnitudes of temperature changes.

9. A method according to Claim 1, wherein said obtaining step is completed prior to said thermal treatment of said tissue region of interest, and wherein said acquiring step includes:

acquiring a plurality of X-ray images of said tissue region of interest; and,

wherein said generating step includes:

generating said thermal information employing said first x-ray image and different ones of said plurality of x-ray images.

10. A method according to claim 1, wherein acquiring step includes:

acquiring a plurality of X-ray images of said tissue region of interest; and,

wherein said generating step includes:

generating said thermal information employing different selected pairs of said plurality of X-ray images.